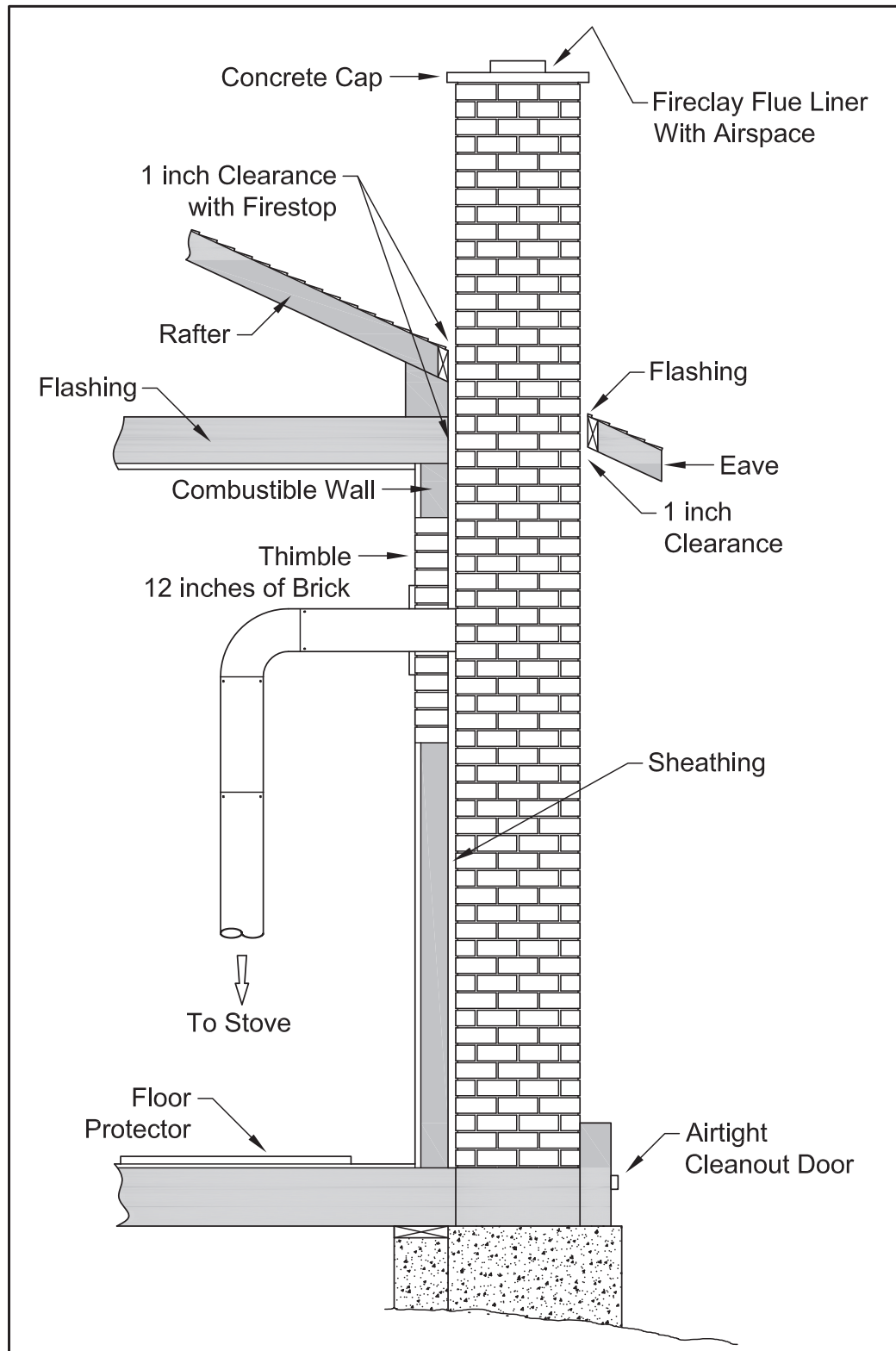
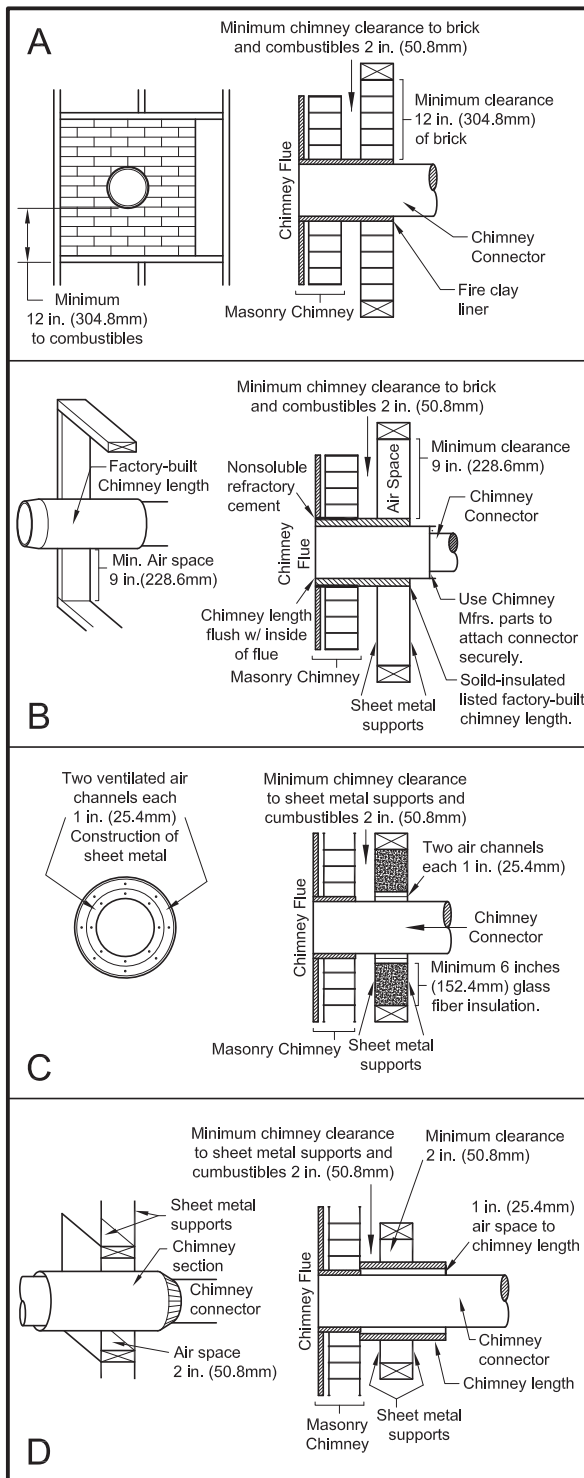


## MASONRY CHIMNEY :

Ensure that a masonry chimney meets the minimum standards of the National Fire Protection Association (NFPA) by having it inspected by a professional. Make sure there are no cracks, loose mortar or other signs of deterioration and blockage. Have the chimney cleaned before the stove is installed and operated. When connecting the stove through a combustible wall to a masonry chimney, special methods are needed.



# Combustible Wall Chimney Connector Pass-Throughs



**Method A. 12" (304.8 mm) Clearance to Combustible Wall Member:** Using a minimum thickness 3.5" (89 mm) brick and a 5/8" (15.9 mm) minimum wall thickness clay liner, construct a wall pass-through. The clay liner must conform to ASTM C315 (Standard Specification for Clay Fire Linings) or its equivalent. Keep a minimum of 12" (304.8 mm) of brick masonry between the clay liner and wall combustibles. The clay liner shall run from the brick masonry outer surface to the inner surface of the chimney flue liner but not past the inner surface. Firmly grout or cement the clay liner in place to the chimney flue liner.

**Method B. 9" (228.6 mm) Clearance to Combustible Wall Member:** Using a 6" (152.4 mm) inside diameter, listed, factory-built Solid-Pak chimney section with insulation of 1" (25.4 mm) or more, build a wall pass-through with a minimum 9" (228.6 mm) air space between the outer wall of the chimney length and wall combustibles. Use sheet metal supports fastened securely to wall surfaces on all sides, to maintain the 9" (228.6 mm) air space. When fastening supports to chimney length, do not penetrate the chimney liner (the inside wall of the Solid-Pak chimney). The inner end of the Solid-Pak chimney section shall be flush with the inside of the masonry chimney flue, and sealed with a non-water soluble refractory cement. Use this cement to also seal to the brick masonry penetration.

**Method C. 6" (152.4 mm) Clearance to Combustible Wall Member:** Starting with a minimum 24 gage (.024" [.61 mm]) 6" (152.4 mm) metal chimney connector, and a minimum 24 gage ventilated wall thimble which has two air channels of 1" (25.4 mm) each, construct a wall pass-through. There shall be a minimum 6" (152.4 mm) separation area containing fiberglass insulation, from the outer surface of the wall thimble to wall combustibles. Support the wall thimble, and cover its opening with a 24-gage minimum sheet metal support. Maintain the 6" (152.4 mm) space. There should also be a support sized to fit and hold the metal chimney connector. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure the metal chimney connector do not penetrate chimney flue liner.

**Method D. 2" (50.8 mm) Clearance to Combustible Wall Member:** Start with a solid-pak listed factory built chimney section at least 12" (304 mm) long, with insulation of 1" (25.4 mm) or more, and an inside diameter of 8" (2 inches [51 mm] larger than the 6" [152.4 mm] chimney connector). Use this as a pass-through for a minimum 24-gauge single wall steel chimney connector. Keep solid-pak section concentric with and spaced 1" (25.4 mm) off the chimney connector by way of sheet metal support plates at both ends of chimney section. Cover opening with and support chimney section on both sides with 24 gage minimum sheet metal supports. See that the supports are fastened securely to wall surfaces on all sides. Make sure fasteners used to secure chimney flue line.

## NOTES:

1. Connectors to a masonry chimney, excepting method B, shall extend in one continuous section through the wall pass-through system and the chimney wall, to but not past the inner flue liner face.
2. A chimney connector shall not pass through an attic or roof space, closet or similar concealed space, or a floor, or ceiling.

## **OUTSIDE COMBUSTION AIR**

Your wood stove is approved to be installed with an outside air intake which is necessary for a tightly constructed home and houses with a negative pressure problem. You can purchase this option through your heater dealer or your local hardware store. Using a Semi-Rigid 4" dryer vent system is optimal. The outside hood must not be the type with louvers, rodent grill only.

Outside combustion air may be required if :

1. Your stove does not draw steadily, smoke rollout occurs, wood burns poorly, or back-drafts occur whether or not there is combustion present.
2. Existing fuel-fired equipment in the house, such as fireplaces or other heating appliances, smell, do not operate properly, suffer smoke roll-out when opened, or back-drafts occur whether or not there is combustion present.
3. Opening a window slightly on a calm (windless) day alleviates any of the above symptoms.
4. The house is equipped with a well-sealed vapor barrier and tight fitting windows and/or has any powered devices that exhaust house air.
5. There is excessive condensation on windows in the winter.
6. A ventilation system is installed in the house.

## WOODSTOVE UTILIZATION

Your heating unit was designed to burn wood only; no other materials should be burned. Waste and other flammable materials should not be burned in your stove. Any type of wood may be used in your stove, but specific varieties have better energy yields than others. Please consult the following table in order to make the best possible choice.

TYPE	WEIGHT (LBS. CU. FT., DRY)	PER CORD	EFFICIENCY RANKING	SPLITS	MILLIONS BTU's/CORD
Hickory	63	4500	1.0	Well	31.5
White Oak	48	4100	.9	Fair	28.6
Red Oak	46	3900	.8	Fair	27.4
Beech	45	3800	.7	Hard	26.8
Sugar Maple	44	3700	.6	Fair	26.2
Black Oak	43	3700	.6	Fair	25.6
Ash	42	3600	.5	Well	25.0
Yellow Birch	40	3400	.4	Hard	23.8
Red Maple	38	3200	.3	Fair	22.6
Paper Birch	37	3100	.3	Easy	22.1
Elm/Sycamore	34	2900	.2	Very Difficult	20.1
Red Spruce	29	1800	.1	Easy	16.1

**It is EXTREMELY IMPORTANT that you use DRY WOOD only in your wood stove.** The wood should have dried for 9 to 15 months, such that the humidity content (in weight) is reduced below 20% of the weight of the log. It is very important to keep in mind that even if the wood has been cut for one, two or even more years, it is not necessarily dry, if it has been stored in poor conditions. Under extreme conditions it may rot instead of drying. This point cannot be overstressed; the vast majority of the problems related to the operation of a wood stove is caused by the fact that the wood used was too damp or had dried in poor conditions. These problems can be:

- ignition problems
- creosote build-up causing chimney fires
- low energy yield
- blackened windows
- incomplete log combustion

Smaller pieces of wood will dry faster. All logs exceeding 6" in diameter should be split. The wood should not be stored directly on the ground. Air should circulate through the cord. A 24" to 48" air space should be left between each row of logs, which should be placed in the sunniest location possible. The upper layer of wood should be protected from the elements but not the sides.

## TESTING YOUR WOOD

When the stove is thoroughly warmed, place one piece of split wood (about five inches in diameter) parallel to the door on the bed of red embers.

Keep the air control full open by pulling on it and close the door. If ignition of the piece is accomplished within 90 seconds from the time it was placed in the stove, your wood is correctly dried. If ignition takes longer, your wood is damp.

If your wood hisses and water or vapor escapes at the ends of the piece, your wood is soaked or freshly cut. Do not use this wood in your stove. Large amounts of creosote could be deposited in your chimney, creating potential conditions for a chimney fire.

THE FIRST FIRES

The fresh paint on your stove needs to be cured to preserve its quality. Once the fuel charge is properly ignited, only burn small fires in your stove for the first four hours of operation. Never open the air control more than necessary to achieve a medium burn rate.

Make sure that there’s enough air circulation while curing the stove. The odors could be smelled during the 3 or 4 first fires. Never start your stove outside. You will not be able to see if you are over heating.

Do not build fires too close to the glass. Try building behind the lip just inside the door opening.

IGNITION

After making sure that the stove air intake controls are fully open (completely pull-out towards you), place several crumpled sheets of paper in the centre of the combustion chamber. Place 8 to 10 pieces of small dry kindling wood over the paper in the form of a tent. You may also place a few pieces of heating wood, but choose the smaller ones. No chemical product should be used to light the fire.

Before igniting the paper and kindling wood, it is recommended that you warm up the chimney. This is done in order to avoid back draft problems often due to negative pressure in the house. If such is the case, open a window slightly near the stove and twist together a few sheets of newspaper into a torch. Light up this paper torch and hold it as close as possible to the mouth of the pipe inside the combustion chamber to warm up the chimney. Once the updraft movement is initiated, you are ready to ignite the stove by lighting the paper and kindling wood inside the combustion chamber.

When you have achieved a good bed of hot embers, we recommend the following burn procedures:

3000			
Primary Air Settings		Electric Blower Speed Setting (Variable)	
(Slide Damper is located in center of stove under hearth plate) (Damper Adjustment: Pulling out on damper increases air)		(Blower is on High when turned "ON", Rotate clockwise until stop for "LOW".)	
Burn Rate	Adjust Damper from fully closed	Burn Time	Blower Speed
Low	1/8" (3.2mm)	@ 30 minutes	Low
Medium - Low	1/4" (6.3mm)	@ 30 minutes	Low
Medium - High	1-1/8" (12.7mm)	@ 30 minutes	Low
High	approx. 3" (76mm)	all minutes	High

CAUTION: Never alter the damper slide or the adjustment range to increase firing for any reason. Doing so could result in heater damage and will void your warranty.

HEATING

Controlled combustion is the most efficient technique for wood heating because it enables you to select the type of combustion you want for each given situation. The wood will burn slowly if the wood stove air intake control is adjusted to reduce the oxygen supply in the combustion chamber to a minimum. On the other hand, wood will burn quickly if the air control is adjusted to admit a larger quantity of oxygen in the combustion chamber. The air intake control on your stove is very simple. If you pull on it out completely towards you, it is fully open. If you push on it until it stops the combustion air is reduced to a minimum. Real operating conditions may give very different results than those obtained during testing according to the species of wood used, its moisture content, the size and density of the pieces, the length of the chimney, altitude and outside temperature.

## **WARNINGS**

- NEVER OVERFIRE YOUR STOVE. IF ANY PART OF THE STOVE STARTS TO GLOW RED, OVER FIRING IS HAPPENING. READJUST THE AIR INTAKE CONTROL AT A LOWER SETTING.
- THE INSTALLATION OF A LOG CRADLE or GRATES IS NOT RECOMMENDED IN YOUR WOOD STOVE. BUILD FIRE DIRECTLY ON FIREBRICK.
- NEVER PUT WOOD ABOVE THE FIREBRICK LINING OF THE FIREBOX.

## **RELOADING**

Once you have obtained a good bed of embers, you should reload the unit. In order to do so, open the air controls to maximum a few seconds prior to opening the stove's door. Then proceed by opening the door very slowly; open it one or two inches for 5 to 10 seconds, before opening it completely to increase the draft and thus eliminate the smoke which is stagnant in a state of slow combustion in the stove. Then bring the red embers to the front of the stove and reload the unit.

For optimal operation of your wood stove, we recommend you to operate it with a wood load approximately equivalent to the height of fire bricks.

It is important to note that wood combustion consumes ambient oxygen in the room. In the case of negative pressure, it is a good idea to allow fresh air in the room, either by opening a window slightly or by installing a fresh air intake system on an outside wall.

**Creosote - Formation and Need for Removal** - When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited this creosote makes an extremely hot fire. The chimney connector and chimney should be inspected at least once every two months during the heating season to determine if a creosote build-up has occurred. If creosote has accumulated (3mm or more), it should be removed to reduce the risk of a chimney fire.

We strongly recommend that you install a magnetic thermometer on your smoke exhaust pipe, approximately 18" above the stove. This thermometer will indicate the temperature of your gas exhaust fumes within the smoke exhaust system. The ideal temperature for these gases is somewhere between 275°F and 500°F. Below these temperatures, the build-up of creosote is promoted. Above 500 degrees, heat is wasted since a too large quantity is lost into the atmosphere.

## **TO PREVENT CREOSOTE BUILD UP**

- Always burn dry wood. This allows clean burns and higher chimney temperatures, therefore less creosote deposit.
- Leave the air control full open for about 5 min. every time you reload the stove to bring it back to proper operating temperatures. The secondary combustion can only take place if the firebox is hot enough.
- Always check for creosote deposit once every two months and have your chimney cleaned at least once a year.

If a chimney or creosote fire occurs, close all dampers immediately. Wait for the fire to go out and the heater to cool, then inspect the chimney for damage. If no damage results, perform a chimney cleaning to ensure there is no more creosote deposits remaining in the chimney.

## ASH DISPOSAL

Ashes should be removed from the stove every few days or when ashes get to 2 to 3 inches deep. Always empty the stove when it is cold, such as in the morning. Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a non combustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the close container until all cinders have thoroughly cooled. Other waste shall not be placed in this container.

### CAUTIONS:

- **ASHES COULD CONTAIN HOT EMBERS EVEN AFTER TWO DAYS WITHOUT OPERATING THE STOVE.**
- **THE ASH PAN CAN BECOME VERY HOT. WEAR GLOVES TO PREVENT INJURY.**
- **NEVER BURN THE STOVE WITH THE ASH TRAP OPEN. THIS WOULD RESULT IN OVER FIRING THE STOVE. DAMAGE TO THE STOVE AND EVEN HOUSE FIRE MAY RESULT.**

## MAINTENANCE

Your wood stove is a high efficiency stove and therefore requires little maintenance. It is important to perform a visual inspection of the stove every time it is emptied, in order to insure that no parts have been damaged, in which case repairs must be performed immediately. Inspect and clean the chimney and connector pipe periodically for creosote buildup or obstructions.

## GLASS

- Inspect and clean the glass regularly in order to detect any cracks. If you spot one, allow the fire to go out and the stove to cool before repairing. Never wash the glass with a product that may scratch the glass. Use a specialized product, available in the stores where wood stoves are sold. The glass should be washed only when the heater is cold.
- Do not abuse the glass door by striking or slamming shut. Do not use the stove if the glass is broken. **If the glass on your stove breaks, replace only with the glass supplied from your heater dealer. Never substitute other materials for the glass.**
- To replace the glass, remove the screws retaining the glass mouldings inside the door. Remove the mouldings and replace the damaged piece with a new one. Perform the procedure backwards after replacing. When replacing the glass, you should change the glass gasket to make sure you keep it sealed.

## GASKETING

It is recommended that you change the door gasket (which makes your stove door air tight) once a year, in order to insure good control over the combustion, maximum efficiency and security. To change the door gasket, simply remove the damaged one. Carefully clean the available gasket groove, apply a high temperature silicone sold for this purpose, and install the new gasket. You may light up your stove again approximately 24 hours after having completed this operation.

### WARNING:

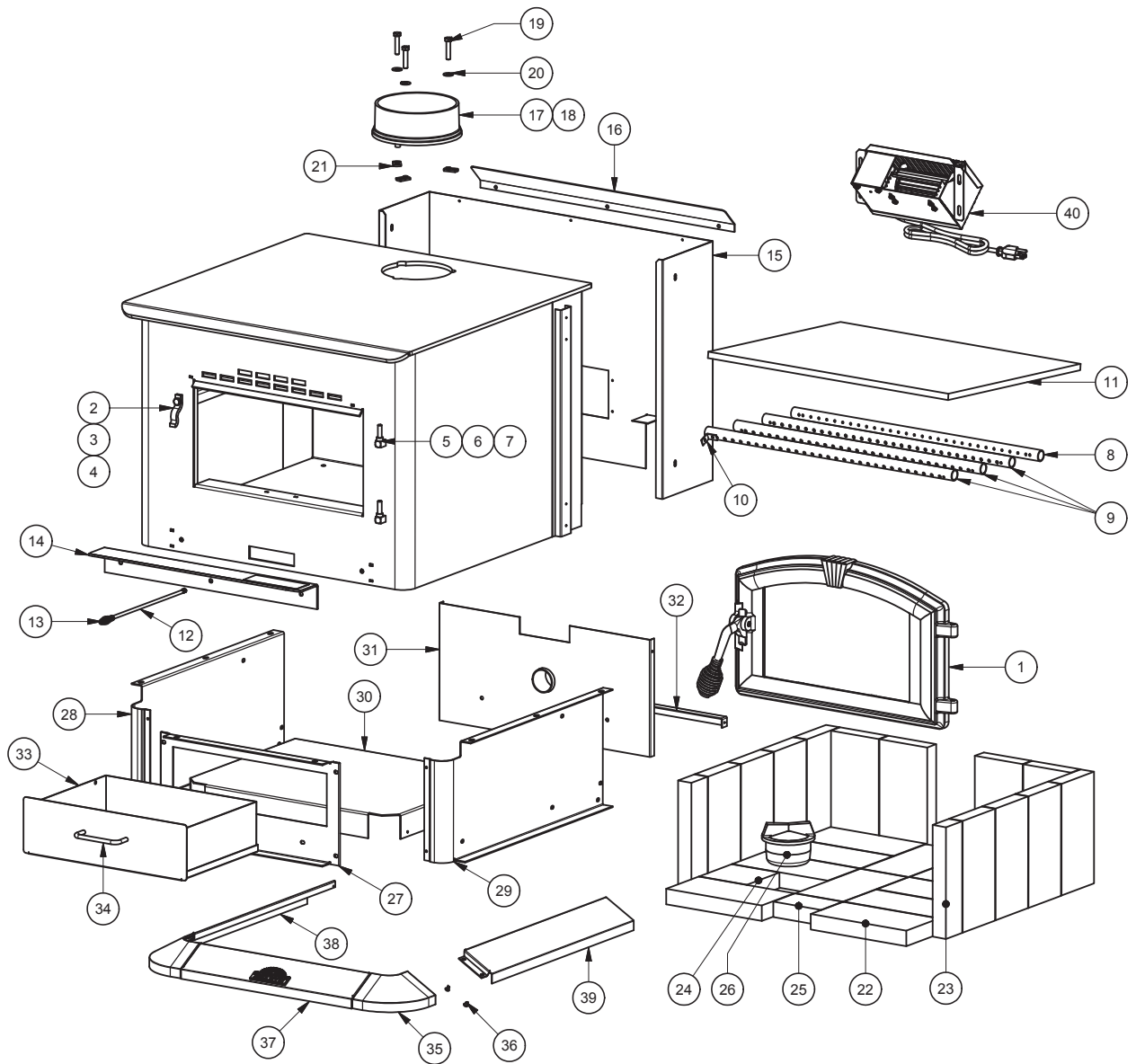
- **NEVER OPERATE THE STOVE WITHOUT A GASKET OR WITH A BROKEN ONE. DAMAGE TO THE STOVE OR EVEN HOUSE FIRE MAY RESULT.**

## PAINT

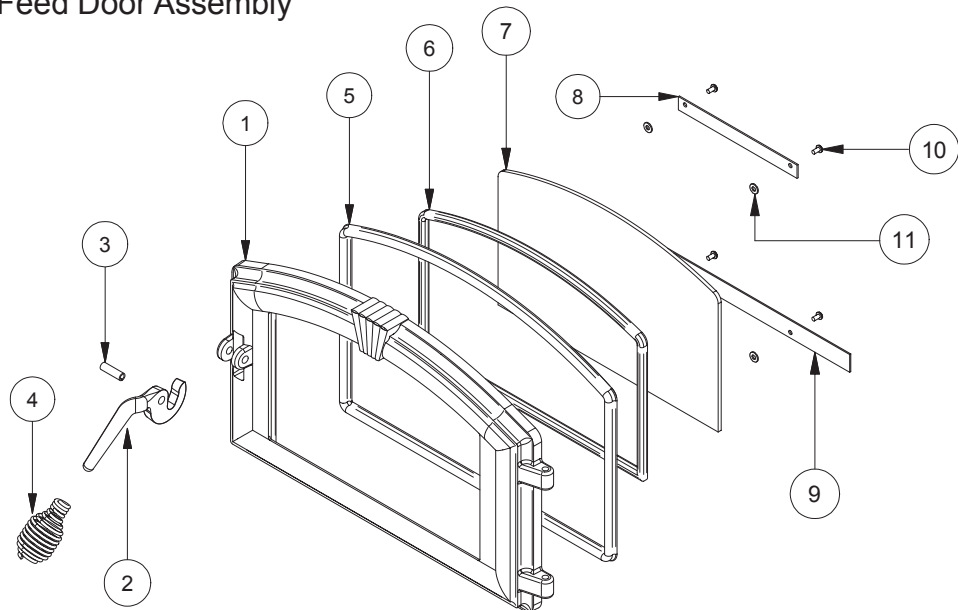
Only clean your stove with a dry soft cloth that will not harm the paint finish. If the paint becomes scratched or damaged, it is possible to give your wood stove a brand new look, by repainting it with a 1200° F heat resistant paint. For this purpose, simply scrub the surface to be repainted with fine sand paper, clean it properly, and apply thin coats (2) of paint successively.



# REPAIR PARTS



## Feed Door Assembly





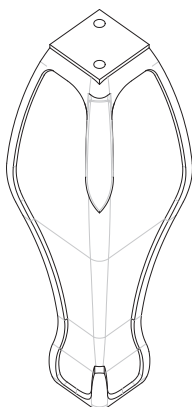
## REPAIR PARTS

Key	Part No.	Description	Qty.
1	69516MB	Feed Door Assy.	1
2	25080B	Feed Door Latch	1
3	83508	5/16-18 x 3/4 Hex Head Bolt	1
4	83338	5/16-18 Lock Nut	1
5	891373	Door Hinge Pad	2
6	83045A	Washer, 3/8" ID x 7/8" OD	2
7	83274	3/8-16 Lock Nut	2
8	86643	Tube, Secondary Air (Ø0.16 holes)	1
9	86645	Tube, Secondary Air (Ø0.22 holes)	2
10	891515	Retainer, Tube (1 per Secondary Tube)	3 - 5
11	88145	Refractory Insulation	1
12	891929	Damper Rod	1
13	891331	Spring Handle - Small	1
14	891517	Hearth Plate	1
15	891761	Shield, Rear	1
16	891528	Air Deflector	1
17	40292A	Flue Collar	1
18	88032	Flue Collar Gasket	1.7 Ft
19	83432	5/16-18 x 1-1/2 Hex Head Bolt	3
20	83045	Washer, 5/16" ID x 3/4" OD	3
21	83431	Weld Tab	3
22	89066	Firebrick (4.5 x 9 x 1.25)	23

Key	Part No.	Description	Qty.
23	891414	Firebrick (2-1/4 x 9)	2
24	24103	Firebrick (4-1/2 x 4-1/2)	1
25	891783	Firebrick (3 x 4-1/2 )	1
26	40561	Ash Plug	1
27	891518	Pedestal Front	1
28	891765	Pedestal, Left Side	1
29	891564	Pedestal, Right Side	1
30	891521	Pedestal Bottom	1
31	891523	Pedestal Back	1
32	891924	Pedestal Brace	1
33	891527	Ash Pan	1
34	891137	Handle	1
35	40496	Corner Trim	2
36	83466	8-32 x 1/4 Self Tapping Screw	8
37	891524	Front Pedestal Trim	1
38	891766	Left Side Pedestal Trim	1
39	891767	Right Side Pedestal Trim	1
N/S ❶	891945	Trim, One Piece	1
40	891492	B36 Blower Assembly	1

N/S = Not Shown  
❶ = Some heaters manufactured in 2011 and beyond may have this trim instead of items 35 thru 39.

Key	Part No.	Description	Qty.
1	25491	Feed Door, Painted (40484)	1
2	25692	Handle, Painted (40515)	1
3	83506	3/8 x 1-1/4 Roll Pin	1
4	891135	Spring Handle - LG	1
5	88066	Rope Gasket - 5/8"	4.6 Ft
6	88087	Glass Gasket - 1/8 thk x 1" wide	3.7 Ft
7	891131	Ceramic Glass	1
8	25464	Top Glass Retainer	1
9	25465	Bottom Glass Retainer	1
10	83202	10-24 x 3/8 Pan Head Phillips Screw	4
11	83278	Washer - 7/32 ID x 1/2 OD	4



For Models with Legs			
Key	Part No.	Description	Qty.
⇐	40566	Leg, Cast Iron	2
N/S	83339	Bolt, 1/4-20 x 3/4	8

## NOTES

## NOTES

## HOW TO ORDER REPAIR PARTS

THIS MANUAL WILL HELP YOU OBTAIN EFFICIENT, DEPENDABLE SERVICE FROM YOUR HEATER, AND ENABLE YOU TO ORDER REPAIR PARTS CORRECTLY.

KEEP THIS MANUAL IN A SAFE PLACE FOR FUTURE REFERENCE.

WHEN WRITING, ALWAYS GIVE THE FULL MODEL NUMBER WHICH IS ON THE NAMEPLATE ATTACHED TO THE HEATER.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION AS SHOWN IN THIS LIST:

1. THE PART NUMBER
2. THE PART DESCRIPTION
3. THE MODEL NUMBER: \_\_\_\_\_
4. THE SERIAL NUMBER: \_\_\_\_\_



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